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CLAIMS

1. Method of regeneration of a motor vehicle particle filter (36), according to which means of regeneration of the filter are used as soon as the load value of the filter exceeds a predetermined threshold, characterized in that a calculation is made of a parameter representing the operating conditions of the means of regeneration, and operation of the means of regeneration is controlled in accordance with the value of said parameter.

2. Method of regeneration according to Claim 1, characterized in that the said parameter is calculated continuously while the vehicle is running.

3. Method of regeneration according to one of Claims 1 and 2, characterized in that the calculation of said parameter is made during use of the means of regeneration.

4. Method of regeneration according to any one of Claims 1 to 3, characterized in that the parameter representing operating conditions of the means of regeneration consists of the ratio between the flow of exhaust gases emanating from the engine of the vehicle and the mass of soot burned in the course of use of the means of regeneration over a predetermined period of time.

5. Method of regeneration according to any one of Claims 1 to 3, characterized in that the parameter representing operating conditions of the means of regeneration consists of the ratio between the instantaneous flow of exhaust gases and the rate of combustion of the soot.

6. Method of regeneration according to any one of Claims 1 to 5, characterized in that operation of the means of regeneration is controlled by a comparison between the value of said parameter and at least one threshold value stored in memory.

7. Method of regeneration according to any one of Claims 4 to 6, characterized in that the flow of exhaust gases is extracted from a map (38) stored in memory in a central computer managing operation of the engine of the vehicle.

8. Method of regeneration according to Claim 4, characterized in that the mass of soot burned is extracted from map (38) stored in memory in the central computer.

9. Method of regeneration according to Claim 4, characterized in that the mass of soot burned is determined from the mass of soot previously burned and the rate of regeneration of the filter.

10. Method of regeneration according to Claim 9, characterized in that the rate of regeneration of the filter is extracted from a map (38) stored in memory in a central computer managing operation of the engine of the vehicle, depending on the internal temperature of the particle filter.

11. Method of regeneration according to Claim 10, characterized in that the internal temperature $Tfcp$ of the particle filter is calculated from the equation:

$$Tfcp = \alpha Te + (1 - \alpha) \times Ts$$

in which

Te designates the inlet temperature of the particle filter;

Ts designates the outlet temperature of the particle filter; and

α designates a coefficient worked out as a function of the difference between the inlet temperature Te and the outlet temperature Ts, based on a mapped function in the central computer.

12. System of control of the regeneration of a motor vehicle particle filter (26), comprising means of control (34) of the load level of the particle filter, in order to produce the use of means of regeneration of the filter, characterized in that it further contains means for calculation of a parameter representing operating conditions of the means of regeneration in order to control operation of the means of regeneration as a function of the value of said parameter.